

REMARKS

The Office Action mailed on April 12, 2007, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1-29 were pending, with claims 12-23 being withdrawn. By this paper, Applicants cancel claims 2 and 6, and do not add any claims. Therefore, claims 1, 3-5 and 7-29 are now pending.

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Acknowledgement of References Cited

Applicants respectfully request that the references listed on the forms submitted with the Information Disclosure Statements filed by Applicants September 07, 2006, be initialed by an examiner and a copy of the form showing the initialization be provided to Applicants' agent. Additional copies of the Forms PTO/SB/08 are enclosed for the PTO's convenience in Appendix A.

Drawing Objections

In the Office Action, the drawings are objected to as allegedly failing to show every feature as claimed. Specifically, it is alleged that the obtuse angle of claim 8 is not shown and the four pinion gears and two side gears of claim 25 are not shown. Applicants respectfully traverse these objections.

The obtuse angle is depicted in Fig. 4(B), and the specification references the angle at page 10. Applicants have amended the specification as seen above to make this clear.

Also, Applicants submit that Figs. 1 and 2 clearly show four pinion gears 42 and two side gears 43.

Reconsideration is requested.

Specification Objections

In the Office Action, the specification contains an alleged informality in its use of the term “scooping.” In response, in order to advance prosecution, and without prejudice or disclaimer, Applicants hereby amend the specification to make clear that the terms “dipping” and “scooping,” are meant to convey the same action. Reconsideration in view of the above amendment is requested.

Claim Rejections Under 35 U.S.C. §112, first paragraph

In the Office Action, claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Office Action asserts that the skilled artisan would not have been able to make an obtuse angle that forces lubrication into an opening. Applicants traverse this rejection.

As a preliminary matter, Applicants respectfully submit that the analysis provided on page 4 of the Office Action is disconnected from the claim language of claim 8. Claim 8 recites that at least a trailing part of a peripheral edge surface of the oil inlet opening defines an obtuse angle relative to a tangential line of the outer surface at a center point of the oil inlet opening. Claim 8 does not recite that the obtuse angle is on the “scooping up” portion. Instead, claim 8 specifies that the obtuse angle is defined by at least a trailing part of a peripheral edge surface *of the oil inlet opening*. That is, assuming *arguendo* that the Office Action is correct that an obtuse angle, located as alleged in the Office Action, would indeed operate as asserted, because the claimed angle is not so located, the assumed correct analysis is not applicable to the recited structure, and thus there is insufficient grounds to reject claim 8 as lacking enablement.

Further, enabling support is not limited to the four corners of the specification and is not measured by the perceptions of an individual examiner. Rather, the standard is that of the ordinarily skilled artisan and the source of enabling information includes that which such an

artisan presumably knows. That is, the correct test for enablement is whether the skilled person could make and use the claimed invention “from the disclosure in the [specification] coupled with information known in the art without undue experimentation.” (*United States v. Teletronics*, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988); see MPEP §2164.01.) Moreover, the burden is on the examiner. In order to make a rejection, an examiner has the initial burden to establish a reasonable basis to question enablement. (MPEP §2164.04.) It has long been the rule that an examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled. (*In re Wright*, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993).)

Applicants respectfully submit that the statements in the Office Action do not satisfy this burden. Not only are the statements insufficient and inapplicable to the present facts, **they contradict the Office Action’s position on the prior art.** That is, the Office Action asserts that the prior art discloses, exactly as claimed, the features of claim 8, for the Office Action rejects claim 8 **as anticipated** by a U.S. Patent, Porsche (No. 2,102,973) **issued 70 years ago**. Yet a claim is anticipated only if each and every limitation is found in a single prior art reference. (*Verdegaal Bros. v. Union Oil*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); see MPEP §2131.) Indeed, to be anticipatory a reference must contain an “enabling disclosure.” (*In re Hoeksema*, 399 F.2d 269, 273 (CCPA 1968).)

Consequently, the position of the Office Action on §112 enablement contradicts its position on the prior art. If the PTO truly believes that the device of claim 8 is taught or suggested by the prior art, then the §112 enablement rejection should be withdrawn. On the other hand, if the PTO truly believes that an ordinarily skilled artisan (with the benefit of Applicants’ claims and specification along the presumptive knowledge of the prior art) would be incapable of making and using the claimed invention without undue experimentation, then the prior art rejections should be withdrawn and the PTO must provide the required reasoned explanation for doubting enablement.

In summary, Applicants respectfully submit that the Office Action is applying an incorrect standard for enablement. A person of ordinary skill in the art – given Applicants’

detailed specification – would have been able to make and use the claimed inventions as of Applicants' original filing date without undue experimentation.

Claim Rejections Under 35 U.S.C. §112, second paragraph

Claims 4 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In response, in order to advance prosecution, and without prejudice or disclaimer, Applicants have amended claims 4 and 10, and respectfully request reconsideration.

Claim Rejections Under 35 U.S.C. §102(b)

In the Office Action, claims 1-11 and 24-29 are rejected under 35 U.S.C. §102(b) as being anticipated by Porsche (United States Patent No. 2,102,973). In response, in order to advance prosecution, and without prejudice or disclaimer, Applicants have made the above amendments to claims 1 and 27 and cancelled claims 2 and 6, and request reconsideration in view of the following.

Applicants rely on MPEP § 2131, entitled "Anticipation – Application of 35 U.S.C. 102(a), (b), and (e)," which states that a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Section 103 amplifies the meaning of this anticipation standard by pointing out that anticipation requires that the claimed subject matter must be "*identically* disclosed or described" by the prior art reference. (Emphasis added.) It is respectfully submitted that Porsche does not describe each and every element of either of independent claims 1 and 27, and thus does not describe any claim now pending.

Claim 1 recites a differential, which includes, among other features, an oil scooping up structure that comprises first projected portions formed on an outer surface of a differential case **at portions that support the pinion shafts through the grooves**. Claim 1 further recites that the first projected portions have an inclined surface at a leading side thereof with respect

to a normal rotation direction of the differential case, the inclined surface defining an acute angle relative to a tangential line of the outer surface at a center point of the projection portion. An exemplary embodiment of a differential according to claim 1 may be seen in the Figs., which depict differential gear unit (40) that includes pinion gears (42, 42) rotatably held by respective pinion shafts (or the pinion shaft unit (41)). The differential is further depicted as comprising a differential case (5) for housing therein the differential gear unit (40). The differential case (5) has, at an inner wall thereof, grooves (13d) (see Fig. 2) for respectively receiving therein the pinion shafts. The differential case (5) is rotatable about a rotation axis thereof (OL) in normal and reverse directions at a position above an oil level (HL). The differential case (5) has an oil inlet opening (17a) formed therethrough. The oil inlet opening (17a) communicates the interior of the differential case (5) with the outside of the differential case (5). The differential further comprises an oil scooping up structure that scoops up the lubricating oil to force the oil to enter the interior of the differential case (5) rotates about the rotation axis in the normal direction.

As will be readily understood from Figs. 4(A) and 4(B), the oil scooping up structure comprises first projected portions (13a) formed on an outer surface (CR) of the differential case (5) at portions that support the pinion shafts through the grooves (13d). Each first projected portion (13a) has an inclined surface (13c) at leading side thereof with respect to the normal rotation direction. The inclined surface (13c) defines an acute angle (81) relative a tangential line (L1) of the outer surface (CR) at a center point of the projected portion (13a).

In the invention according to claim 1, as is clearly depicted in Fig. 2, the first projected portions (13a) are formed on an outer surface (CR) of the differential case (5) **at portions that support the pinion shafts through the grooves (13d)**. This means that due to the provision of the first projected portions (13a), the portions of the differential case (5) that need high mechanical strength for supporting the pinion shafts can have an increased thickness. In addition to this, each first projected portion (13a) serves as an oil scooping up device. With these features, it becomes possible to provide a differential case having a thinner wall, which means a light weight construction of the differential case (5) and thus that of the differential. In other words, according to the device of claim 1, a structure employed

for increasing the mechanical strength of the differential case (5) is effectively used for promoting feeding of oil into the interior of the differential case (5).

Porsche fails to anticipate claim 1 because it fails to describe, exactly as claimed, the device of claim 1. Porsche does teach a universal joint. Fig. 3 depicts a rotating case (11) that has openings (18, 19) and a vane (17) integrally formed thereon. As is understood from Fig. 4 of Porsche, when the rotating case (11) is rotated, the vane (17) functions to guide the oil into the opening (18). However, this reference fails to disclose the above-mentioned features of claim 1, *that the first projected portions are formed on an outer surface of a differential case at portions that support the pinion shafts through the grooves*. In this regard, in Porsche, thick portions of the rotating case (11) that support both ends of a bolt (12) and the vane (17) are separated from each other, unlike the case of the invention of claim 1.

As detailed above, a reference can anticipate a claim only if that reference teaches a device exactly as claimed. Because Porsche fails to teach, either expressly or inherently, each element of claim 1, claim 1 is not anticipated by Porsche.

Claim 27 is not anticipated by Porsche for reasons analogous to those of claim 1 just detailed. The claims that depend from claims 1 or 27 are not anticipated by Porsche for at least the reason that those claims are not anticipated by Porsche. Reconsideration and allowance is respectfully requested.

Rejoinder of Claims 12-23

Claims 12-23 stand withdrawn. Applicants note that these claims depend either directly or ultimately from claim 1. Applicants respectfully request that these claims be rejoined and allowed due to their dependency from claim 1, a claim that is allowable. Applicants respectfully submit that no significant burden is placed on the PTO by rejoining and examining these claims. Indeed, such action is concomitant with the indication that “upon allowance of a generic claim, applicant will be entitled to consideration of claims to

additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim.”

Conclusion

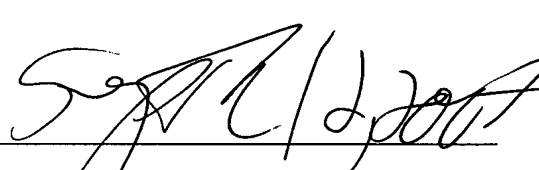
Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

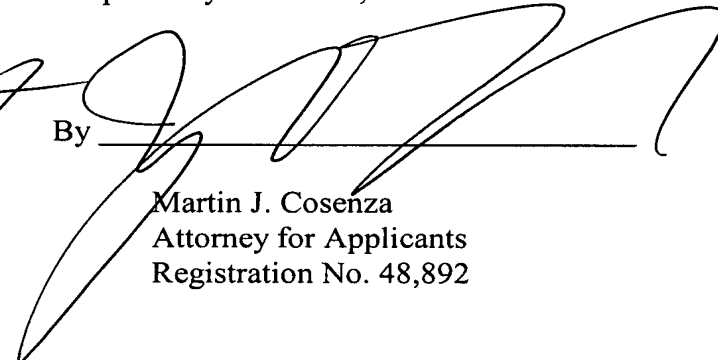
Examiner Pilkington is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date



By



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APPENDIX A